

## IOWA DEPARTMENT OF TRANSPORTATION

**TO OFFICE:** Design **DATE:** December 13, 2013  
**ATTENTION:** Section Engineer **REF. :** County  
**FROM:** Robert L. Stanley **Proj. #:**  
**OFFICE:** Design **PIN:**  
**SUBJECT:** Completed S1 Review

Soils Design has completed the S1 review on the above-referenced project, and our results are discussed and presented within this memorandum. The proposed project is on [project location and the general project concept]. The total project length is [miles or kilometers].

[Additional comments, understanding, etc]. Material and other items used for the S1 included topographic maps, aerial photographs, soil survey maps, LIDAR imagery, as built plans, etc. A field review was done by (names) on (Date: Month, Day, and Year).

### **Grade/Alignment Review**

There (are or is: no or number of) geotechnical aspects identified within the proposed corridor that could or would prevent the project from being completed or necessitate changing the alignment.

The following factors are noted that are (either major geotechnical concerns that could prevent the project from being completed or necessitate changing the alignment or not major geotechnical concerns, but worth noting). [Additional comments, etc].

### **Borrows**

Soils Design was not provided with any indication of borrow need or distribution. Therefore, to cover all possibilities related to how much material might be needed and where, (total number) potential borrow sites were identified. Some of these sites may turn out to be unsuitable or have archeological conflicts, wetland conflicts and/or other problems. Typically, Soils Design identifies more and/or larger borrow sites than will likely be required.

The potential borrow sites were chosen based on the following criteria: potential for Select and/or Class 10 material (and any added comments relating to material suitability such as high or low potential, etc), proximity to the alignment (note exceptions), topographic advantages, etc. Soils Design's objective is to, where and when possible, try to select potential borrow sites that will have minimal impact to farmland, by selecting irregular shaped plots, landlocked areas, etc., as well as not locate sites too close to homesteads, environmental sites, apparent wetlands, etc.

[List potential borrow sites below. Provide a brief description about each site including the size of the site in acres, the potential borrow type (drainable, pond, backslope, etc.), the parent material potentially available, the potential of site to be a source of Class 10 material and/or Select material, and any other necessary information.]

Potential Borrow Site 1:

Potential Borrow Site 2:

[Potential Borrow Site etc.]

The outlines of the (number) potential borrow sites can be found in the S1 Submittal folder of the Project Directory as a:

1. Microstation file-
2. Photo file-
3. KML file-

After more information is obtained, as project development progresses, and after drilling, there is the possibility of some of the potential borrow sites being eliminated. Soils Design anticipates ending up with (number) or (number) borrow sites being used as final/selected borrows for use on this project, depending on final need and need location.

Soils Design requests that Photogrammetry review the need for additional air photo coverage and survey control of those potential borrow sites that extend beyond present coverage. Soils Design also requests feedback from the District, Office of Right of Way, and Office of Location and Environment (concerning archeological, cultural, wetland, and/or environmental conflicts).

You may indicate your acceptance or request additional information by e-mail.

RLS:xxx: [the triple x is for the writer's initials; memo is to be submitted to Mona before distribution]

Attach.

cc: Office of Design Engineer

Office of Asst Design Engineer – Development

Office of Asst Design Engineer – Support

District Engineer

Asst. District Engineer

District Construction Engineer

OLE Director, Wetland Section Supervisor, Cultural/Historic Resource Team Leader

ROW Director, ROW Design Supervisor, ROW Acquisition Team Leader

Photogrammetry Engineer and Survey Supervisor

Roadside Development Supervisor

Office of Construction – Construction Engineer

Design Section Asst Engineer and Design Section Tech

Soils Design Asst Engineer

Soils Design Geologists

